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PROCESS ASSEMBLY UTILIZING FIXTURING MADE OF AN OPEN-CELL CERAMIC SOLID FOAM, AND ITS USE

ABSTRACT OF THE DISCLOSURE

A sacrificial ceramic fixture precursor is furnished with a shaped portion thereof shaped to receive a supported article. The sacrificial ceramic fixture precursor is immersed into a molten reactive metal for a period of time sufficient to permit the sacrificial ceramic fixture precursor and the reactive metal to react together. The result is a reacted ceramic fixture comprising an open-cell solid foam of ceramic cell walls having an interconnected intracellular volume therebetween. The reacted ceramic fixture is contacted to a supported article to produce a process assembly. The process assembly is processed as required for the supported article, which typically includes heating to an elevated temperature.